

IN THE CLAIMS:

Please amend claim 1 and cancel claims 15-16, as follows:

1. (Currently Amended) A method of optically detecting the three-dimensional shape of an interior space defined by an inner wall, comprising the steps of:

providing said interior space with an elastic envelope in snug contact with the inner wall and marked with marks facing the inside of the space and adapted to be evaluated photogrammetrically;

producing a number of overlapping image recordings of said interior space marked in this way with the aid of one or more ~~imaging devices~~ 2D-cameras; and,

using photogrammetrical methods for determining from said recordings the three-dimensional shape of that part of said interior space that was detected by said overlapping recordings.

2. (Previously presented) The method according to claim 1, wherein the side of the marked envelope facing the inner wall is provided with a means adhering to said inner wall prior to insertion into the interior space.

3. (Previously presented) The method according to claim 2, wherein an inflatable cover is inserted into the marked envelope, said envelope is placed into the interior space with said cover and there said envelope is pressed against the inner wall of the interior space to be detected by admitting internal pressure into said cover such that it is in snug contact with said inner wall, and in that afterwards said cover is relieved from pressure and removed, in order to make room for the insertion of one or more imaging devices.

4. (Previously presented) The method according to any of claims 1 to 3, wherein the interior space constitutes the interior of a product which is in contact with the human body during use.

5. (Previously presented) The method according to claim 4, wherein the interior space is the interior of footwear.

6. (Previously presented) The method according to claim 4, wherein the interior space is the interior of a prosthesis funnel for receiving a limb stump .

7. (Previously presented) The method according to any of claims 1 to 3, wherein the interior space is the interior of an orifice of the body.

8. (Previously presented) The method according to any of claims 1 to 3, wherein a video camera is used as imaging device and that the overlapping image recordings of the interior space are recorded in the form of one or more video sequences.

9. (Previously presented) The method according to any of claims 1 to 3, wherein the imaging device(s) is/are rotated axially and successively record(s) both axially and radially overlapping recordings of the marked interior space.

10. (Previously presented) The method according to any of claims 1 to 3, wherein the imaging device(s) inside the interior space is/are put into the different overlapping recording positions.

11. (Previously presented) The method according to any of claims 1 to 3, wherein the interior space is mapped on the imaging device in radial bands via a collar-shaped mirror.

12. (Previously presented) The method according to any of claims 1 to 3, wherein the imaging device(s) is/are guided in the interior space by spacers.

13. (Previously presented) The method according to any of claims 1 to 3, wherein the overlapping image fields are transmitted from the interior space to one or more imaging device(s) located outside the interior space via an endoscopic system.

14. – 16. (Canceled)